Work Order ID 55615

January 25, 2010 12:46:56 PM

Item ID: D2360
Revision ID:
Item Name: Litter Tie Down Assembly
Start Date: 1/25/10 **Start Qty:** 6.00
Required Date: 2/01/10 **Req'd Qty:** 6.00
Reference:

Accept

Setup Start
Stop

Cust Item ID:
Customer:

Run Start
Stop

Approvals: **Process Plan:** AD **Date:** 10-1-25 **Tooling:** **Date:**
QC: **Date:** **SPC (Y/N):** **Date:**

Draw Nbr	Revision Nbr
D2360	Rev D

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
100 Bandsaw Jeaspa Bandsaw	BAND SAW **Memo** Cut blanks: 12.65" Long	0.00 0.00 MK 10/01/30				6	0		
110 HAAS 1 HAAS CNC vertical machine #1	HAAS CNC VERTICAL MACHINING #1 **Memo** Machine as per Folio D2341 and Dwg D2341 2-Deburr	0.00 0.00 MK 10/02/01				6	0		
120 QC Quality Control	QC2- Inspect parts off machine FAI/FAIB **Memo**	0.00 MK 10/02/01 0.00				6	0		

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55615

January 25, 2010 12:46:56 PM

Item ID: D2360
Revision ID:
Item Name: Litter Tie Down Assembly
Start Date: 1/25/10 **Start Qty:** 6.00
Required Date: 2/01/10 **Req'd Qty:** 6.00
Reference:

Accept **Setup Start** **Stop**

Cust Item ID:
Customer:

Run Start **Stop**

Approvals: **Process Plan:** **Date:** **Tooling:** **Date:**
QC: **Date:** **SPC (Y/N):** **Date:**

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 QC Quality Control	QC8- Inspect parts - second check	0.00				6	0		
	Memo	0.00 DJP 10/02/02							
140 HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1	0.00 BR 10-02-5				6			
	Memo	0.00							
150 Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M113170	0.00				6	0		
	Memo START TIME: 10:30AM OVEN TEMPERATURE: 320°F FINISH TIME: 11:00AM	0.00 JH 10/02/05							

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55615

January 25, 2010 12:46:56 PM

Item ID: D2360 **Accept** **Setup Start** **Stop**

Revision ID:

Item Name: Litter Tie Down Assembly

Start Date: 1/25/10 **Start Qty:** 6.00 **Cust Item ID:**

Required Date: 2/01/10 **Req'd Qty:** 6.00 **Customer:**

Reference: **Run Start** **Stop**

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00				6	0		
QC	Memo	0.00							
Quality Control									
170		0.00							
Small Fab	Small Fab								
Small Fab	Memo	0.00							
	Assemble as per dwg D2360								
180	QC5- Inspect part completeness to step on W/O	0.00				+6			
QC	Memo	0.00							
Quality Control									

10-02-8

5/10/03/10 6

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55615

January 25, 2010 12:46:56 PM

Item ID: D2360
Revision ID:
Item Name: Litter Tie Down Assembly
Start Date: 1/25/10 **Start Qty:** 6.00
Required Date: 2/01/10 **Req'd Qty:** 6.00
Reference:

Accept

Setup Start
Stop

Cust Item ID:
Customer:

Run Start
Stop

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____
QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location: 224	0.00							
Packaging	**Memo**	0.00							
Packaging									
200	QC21- Final Inspection - Work Order Release	0.00							
QC	**Memo**	0.00							
Quality Control									

11/3/11 (6)

10/03/11 MF

MF 10-3-11

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	**STEP**	**PROCEDURE CHANGE**	**By**	**Date**	**Qty**	**Approval** Chief Eng / Prod Mgr	**Approval** QC Inspector

Part No: _____ **PAR #:** _____ **Fault Category:** _____ **NCR:** Yes No **DQA:** _____ **Date:** _____

Resolution: _____ **Disposition:** _____ **QA: N/C Closed:** _____ **Date:** _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	**STEP**	**Description of NC** Section A	**Corrective Action** Section B			**Verification** Section C	**Approval** Chief Eng	**Approval** QC Inspector
			Initial Chief Eng	**Action Description** Chief Eng	**Sign & Date**			

NOTE: Date & initial all entries

Picklist Print

February 12, 2010 8:23:44 AM

Work Order ID: 55615

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Comments: IPP rev H 07.06.12 ecn 825 EC

Start Date: 1/25/10 **Required Date:** 2/01/10

Start Qty: 6.00 **Required Qty:** 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN526C1032R18		Purchased	No				Each	462.0000	1.0000			
Screw												

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	462	
101458	74	
108079	194	
4523	194	

QSI017 NAS1149D0363J M113288 (12x)

AN960JD10		Purchased	No			Each	0.0000	2.0000
Washer								
AN960JD10L		Purchased	No			Each	3,457.000	8.0000
Washer								

QSI017 NAS1149D0332J M112794 (8x)

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	3457	
101291	16	
105793	49	
110985	3392	

Picklist Print

February 12, 2010 8:23:45 AM

Work Order ID: 55615

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Comments: IPP rev H 07.06.12 ecn 825 EC

Start Date: 1/25/10 **Required Date:** 2/01/10

Start Qty: 6.00 **Required Qty:** 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2002-015		Manufactured	No				Each	72.0000	2.0000			
Knob												

Warehouse Location	Loc Qty	Loc Code		
Main Warehouse				
ST003	72			9
16177	69			3
39056	3			

D2341		Manufactured	No		Each	0.0000	1.0000
Litter Lock Bracket							
D2345		Manufactured	No		Each	6.0000	1.0000
Lock Channel							

Warehouse Location	Loc Qty	Loc Code	
Main Warehouse			
ST011	6		6
39474	6		

Picklist Print

February 12, 2010 8:23:45 AM

Work Order ID: 55615

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Comments: IPP rev H 07.06.12 ecn 825 EC

Start Date: 1/25/10 **Required Date:** 2/01/10

Start Qty: 6.00 **Required Qty:** 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2366 Lock Handle		Manufactured	No				Each	15.0000	2.0000		10/02/23	
				Warehouse Location		**Loc Qty**		**Loc Code**				
				Main Warehouse								
				ST012		15						
				42919		15				12		
D2367 Handle Knob		Manufactured	No				Each	12.0000	1.0000		10/02/23	
				Warehouse Location		**Loc Qty**		**Loc Code**				
				Main Warehouse								
				ST012		12						
				42975		12				6		
D2372 Quick Release		Manufactured	No				Each	9.0000	2.0000		10/02/23	
				Warehouse Location		**Loc Qty**		**Loc Code**				
				Main Warehouse								
				ST		9						
				55058		9				9		

B56453 (3x)

Picklist Print

February 12, 2010 8:23:46 AM

Work Order ID: 55615

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Comments: IPP rev H 07.06.12 ecn 825 EC

Start Date: 1/25/10 **Required Date:** 2/01/10

Start Qty: 6.00 **Required Qty:** 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2373		Manufactured	No				Each	19.0000	1.0000			
Spring												

Warehouse Location	Loc Qty	Loc Code	
Main Warehouse			
ST012	19		6
42920	19		

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2444		Manufactured	No				Each	13.0000	1.0000			
Pip Pin Assembly												

Warehouse Location	Loc Qty	Loc Code	
Main Warehouse			
ST	13		6
54801	13		

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS20470AD3-4		Purchased	No				Each	11,757.00	1.0000			
Rivet,Universal Head												

Warehouse Location	Loc Qty	Loc Code	
Main Warehouse			
ST	11757		
111477	8332		
15541	3425		6

Picklist Print

February 12, 2010 8:23:46 AM

Work Order ID: 55615

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Comments: IPP rev H 07.06.12 ecn 825 EC

Start Date: 1/25/10 **Required Date:** 2/01/10

Start Qty: 6.00 **Required Qty:** 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS21042L3		Purchased	No				Each	2,681.000	3.0000			
Nut											5/10/02/23	

Warehouse Location	Loc Qty	Loc Code		
Main Warehouse				
ST	2675			
110844	35			
111274	27			
111668	52			
112314	289			
112385	498		18	
113523	74			
113537	700			
113644	1000			
Main Warehouse				
ST139	6			
111668	6			

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS27039-1-13		Purchased	No				Each	98.0000	1.0000			
Screw											5/10/02/23	

Warehouse Location	Loc Qty	Loc Code		
Main Warehouse				
ST	98			
105211	3			
110844	95		6	

Picklist Print

February 12, 2010 8:23:47 AM

Work Order ID: 55615

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Comments: IPP rev H 07.06.12 ecn 825 EC

Start Date: 1/25/10 **Required Date:** 2/01/10

Start Qty: 6.00 **Required Qty:** 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS27039-1-15		Purchased	No				Each	124.0000	2.0000			
Screw												

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	124	
106903	3	
108169	4	
109321	4	
111916	13	
112794	100	

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
NAS679A3W		Purchased	No				Each	238.0000	1.0000			
Nut												

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	238	
1463	45	
2409	193	

Picklist Print

January 25, 2010 12:47:00 PM

Work Order ID: 55615

Parent Item: D2360

Parent Item Name: Litter Tie Down Assembly

Comments: IPP rev H 07.06.12 ecn 825 EC

Start Date: 1/25/10 **Required Date:** 2/01/10

Start Qty: 6.00 **Required Qty:** 6.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS24693-C48		Purchased	No				Each	197.0000	44.0000			
Screw												

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	197	
110322	97	
111383	100	

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
MS35207-264		Purchased	No				Each	77.0000	8.0000			
Screw												

Warehouse Location	Loc Qty	Loc Code
Main Warehouse		
ST	77	
109031	27	
111359	50	

NA WRONG

D6201 Batch # B45500 6.641' mk 10/01/30

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	55615
Description: LITTER TIE DOWN BRACKET	Part Number:	D2341
Inspection Dwg: D2341 Rev: F		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article [] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
1.750	±.010	1.750	—			
2.75	±.030	2.738	—			
Ø.242	+.005 −.001	Ø.243	—			
Ø.191	+.005 −.001	Ø.193	—			
R.25	±.030	R.250	—			
R.40	±.030	R.400	—			
12.50	±.030	12.500	—			
11.750	±.010	11.750	—			
11.00	±.030	11.000	—			
7.00	±.030	7.000	—			
6.250	±.030	6.250	—			
5.50	±.030	5.500	—			
1.50	±.030	1.503	—			
.750	±.010	.757	—			
.400	±.010	.398	—			
1.584	±.010	1.578	—			
2.610	±.010	2.603	—			
.250	±.010	.248	—			
.844	±.010	.843	—			
Ø.250	±.010	.250	—			
.750	±.010	.757	—			
3.313	±.010	3.310	—			
4.250	±.010	2.246	—			
1.250	±.010	1.246	—			

Measured by:	[signature]
Date:	10/02/01

Audited by:	DJD
Date:	10/02/02

Prototype Approval:	N/A
Date:	N/A

Rev	Date	Change	Revised by	Approved
A		New issue	KJ/JLM	

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD
BW	CB	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. / REV.
CE		D2360 / D
DATE		SHEET 1 OF 2
07.06.06		TITLE / SCALE
		LITTER TIE DOWN ASSEMBLY (LOCKING) / NTS

A	95.02.10	NEW ISSUE
B	95.02.20	RE-DESIGN
C	97.08.27	ADD MS20470AD3-4 RIVET
D	07.06.06	D2002-015 WAS D2376; SECTION B-B QTY(2) AN960JD10 WAS QTY(3) QTY(8) AN960JD10L WAS QTY(5)

RELEASED
97 06 27
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 55415
BY 10-1-25

PARTS LIST:

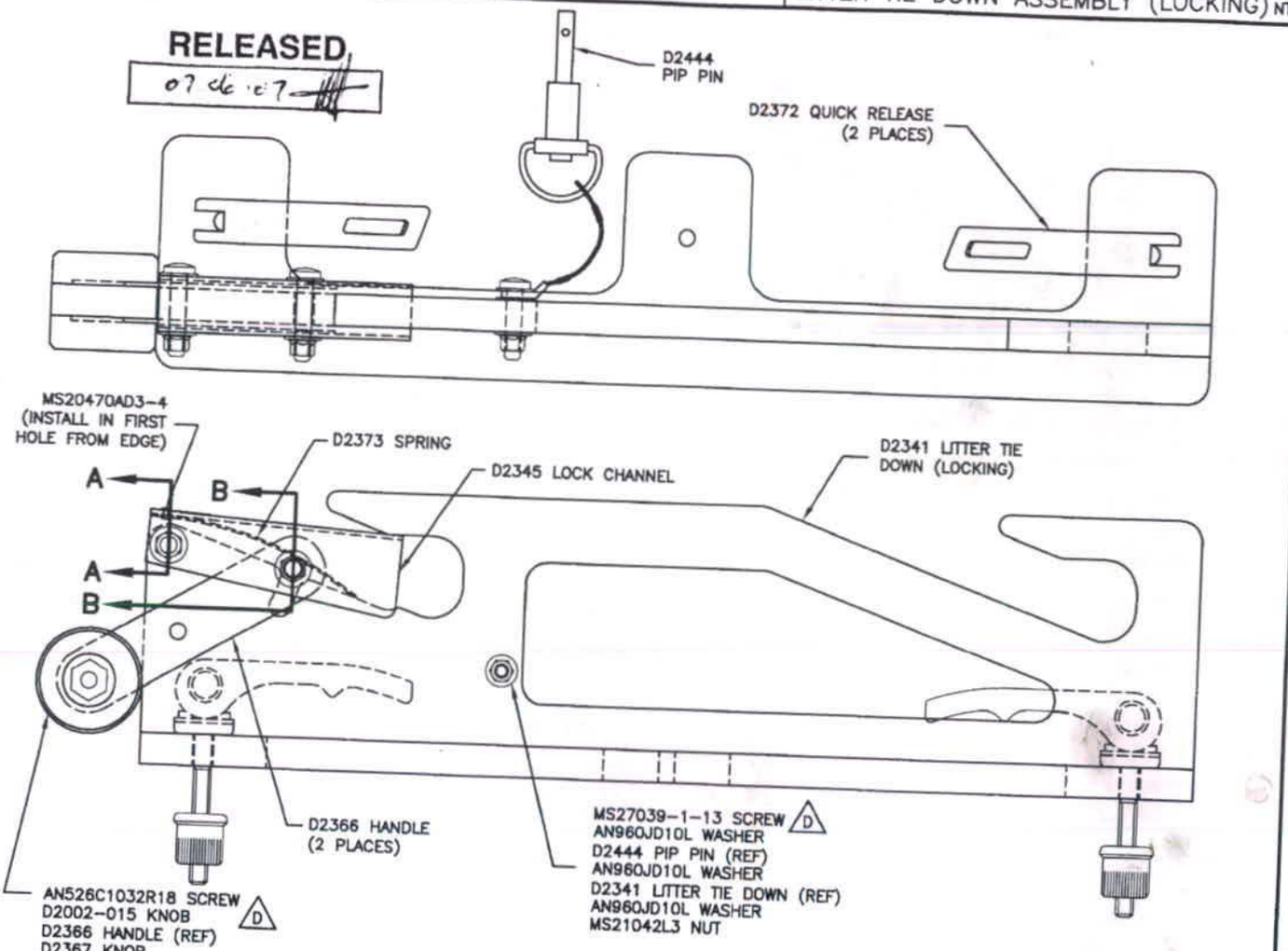
	QTY	PART NUMBER	DESCRIPTION
	X	D2360	LITTER TIE DOWN ASSEMBLY (LOCKING)
	1	D2341	LITTER TIE DOWN (LOCKING)
	1	D2345	LOCK CHANNEL
	2	D2366	LOCK HANDLE
	1	D2367	KNOB (DELRIN)
	2	D2372	QUICK RELEASE FASTENERS
	1	D2373	SPRING
△D	2	D2002-015	KNOB (DELRIN)
	1	D2444	PIP PIN
	1	AN526C1032R18	SCREW
△D	2	AN960JD10	WASHER
△D	8	AN960JD10L	WASHER
	1	MS20470AD3-4	RIVET
	3	MS21042L3	NUT (OR MS21042-3)
	1	MS27039-1-13	SCREW
	2	MS27039-1-15	SCREW
	1	NAS679A3W	NUT

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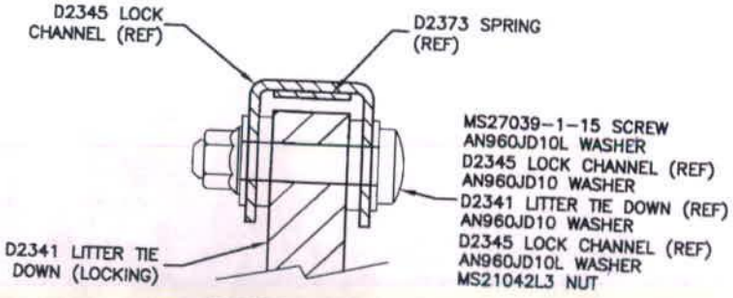
w/o 55615

DESIGN	DRAWN BY	DART AEROSPACE LTD
BW	CB	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. / REV.
CE		D2360 / D
DATE		SHEET 2 OF 2
07.06.06		TITLE / SCALE
		LITTER TIE DOWN ASSEMBLY (LOCKING) NTS

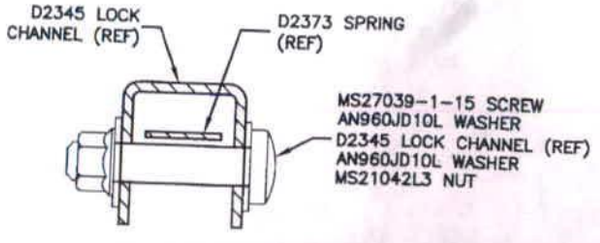
RELEASED
07 de c 7



D2360 LITTER TIE DOWN ASSEMBLY (LOCKING)



SECTION A-A
(SCALE 1:1)



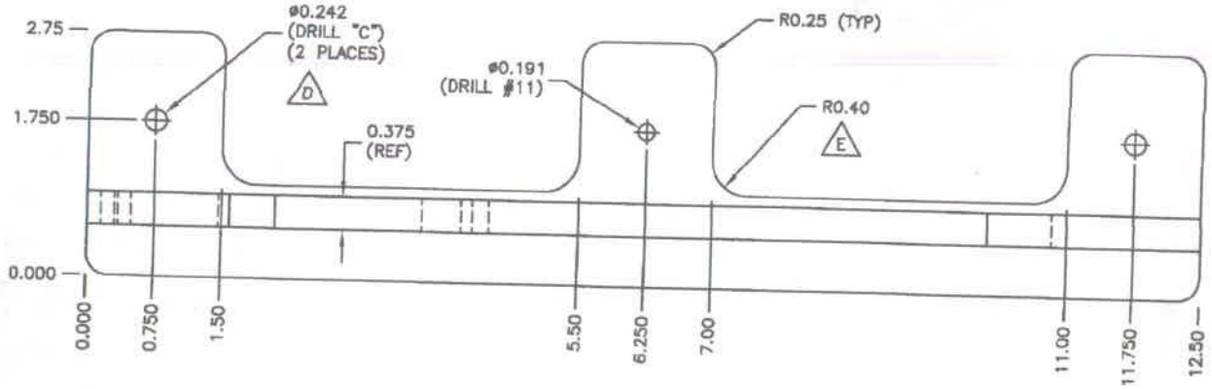
SECTION B-B △D
(SCALE 1:1)

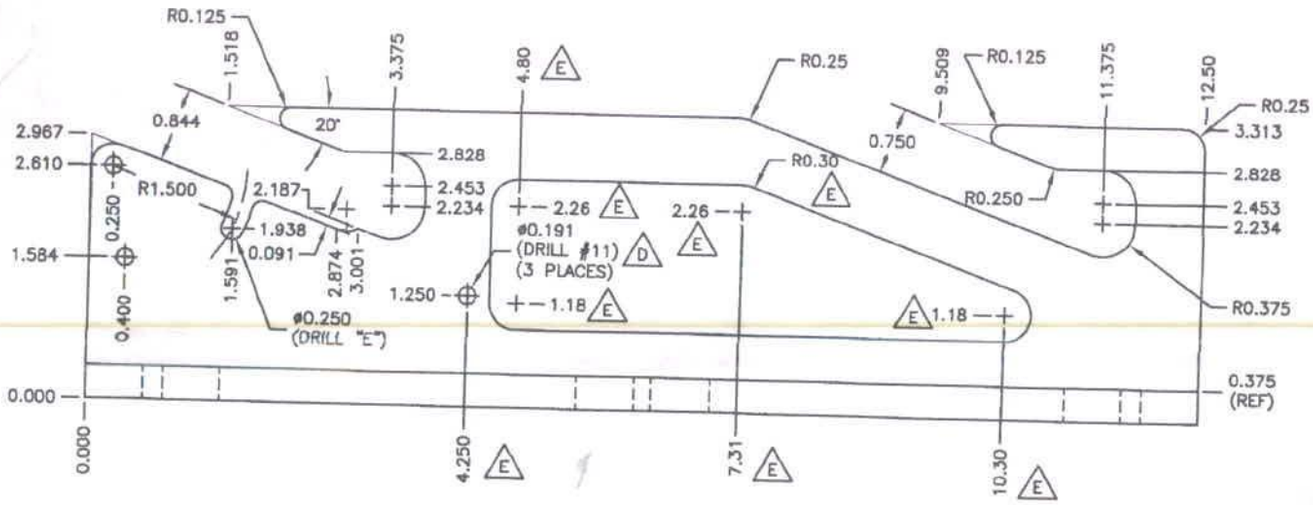
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DART

DESIGN	DRAWN BY	DART AEROSPACE LTD
BW	SC	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2341 REV. F
DATE 07.06.07		SHEET 1 OF 1
		TITLE LITTER TIE DOWN BRACKET (LOCKING) SCALE 1:2

A	95.01.13	NEW ISSUE
B	95.02.14	MODIFIED LOCK
D	95.02.20	CHANGES TO DIAMETERS
E	97.10.01	CHANGES FOR MACHINING
F	07.06.07	REVISED NOTES; FINISH WAS ANODIZE





D2341 LITTER TIE DOWN BRACKET (LOCKING)

1) MATERIAL: MAKE FROM D6201-0125 EXTRUSION (6061-T6/T651 PER QQ-A-200/8)
F 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 POWDER COAT WHITE (REF. 4.3.5.1) PER QSI 005 4.3
3) BREAK ALL SHARP EDGES TO 0.005 TO 0.010
4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
5) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
6) IDENTIFY WITH DART P/N "D2341" USING FINE POINT PERMANENT INK MARKER

RELEASED
07.06.22

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